

EXPLORING TOURIST ADOPTION AND PERCEPTION OF E-HAILING SERVICES: AN EMPIRICAL STUDY OF UNESCO WORLD HERITAGE SITE OF MELAKA

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Article history

Received date : 20-9-2023

Revised date : 21-9-2023

Accepted date : 29-10-2024

Published date : 15-11-2024

To cite this document:

Jais, A. S., Marzuki, A., & Aliman, Z. (2024). Exploring tourist adoption and perception of e-hailing services: An empirical study of UNESCO World Heritage Site of Melaka. *Journal of Islamic, Social, Economics and Development (JISED)*, 9 (67), 491 - 501.

Abstract: *The adoption of e-hailing services by tourists has become increasingly relevant yet remains underexplored in academic research. This study investigates the acceptance and usage behaviour of e-hailing services among tourists visiting Melaka, a UNESCO World Heritage Site in Malaysia. Using a quantitative approach, empirical data were collected through questionnaires (n=397) and analysed using Pearson and Spearman's rank correlation to assess the relationship between behavioural intention and actual usage. Empirical findings reveal a statistically significant but weak positive correlation ($r=0.123$, $p=0.014$) between tourists' intentions and their usage behaviour. Furthermore, 86.6% of respondents demonstrated high awareness of e-hailing services, and 78.3% expressed acceptance. The study highlights the need for targeted marketing strategies, infrastructure enhancements, and stakeholder collaboration to address varying levels of awareness and optimise service adoption. These insights underscore the critical role of e-hailing services in enhancing tourist mobility and satisfaction, offering actionable recommendations for policymakers and service providers to advance the integration of e-hailing solutions in tourism planning.*

Keywords: *E-hailing, Tourist Behaviour, Service Adoption, Melaka, Transportation Infrastructure*

Introduction

Research into tourists' intentions to use e-hailing services remains limited despite the growing significance of such services in travel planning (Hall et al., 2017; Septiani et al., 2017; Wan Mohamad et al., 2016). While transportation modes like air travel and trains have received extensive attention, e-hailing services are relatively underexplored in tourism literature. Transportation infrastructure plays a vital role in tourist destination selection, alongside accommodation and destination attractiveness (Yap et al., 2008). A well-developed transportation network improves tourist satisfaction by offering reliable and efficient services (Kantawateera et al., 2015; Kaya et al., 2014; T. Escobar-Rodríguez & Carvajal-Trujillo, 2014).

However, many destinations suffer from inadequate transportation systems, leading to issues like limited coverage, inconsistent service, high costs, and insufficient information (Danielis et al., 2012; Li et al., 2017; Malodia & Singla, 2016; S. A. Shaheen et al., 1999). These inadequacies hamper tourists' mobility and limit their exploration of specific areas (Amir et al., 2015a). For example, in Melaka, insufficient transportation infrastructure exacerbates traffic congestion and environmental concerns (Astro Awani News Portal, 2015). To address these challenges, tourists increasingly turn to alternative transportation options, including e-hailing services, which offer flexibility and convenience (Wan Mohamad et al., 2016). However, the acceptance of these services among tourists remains underexplored (J. Zmud et al., 2016).

Recent studies further emphasise the role of e-hailing in bridging mobility gaps. For instance, Obeng and Ackaah (2023) highlight how digitalising transport systems, such as Ghana's paratransit model, can enhance connectivity and convenience for users, including travellers. Similarly, Shah (2022) explores how mobile app-based car rental services in India align with consumer expectations, providing insights into service quality factors that drive adoption. Nugroho and Zhang (2022) demonstrate the potential of e-hailing to support tourist engagement by improving accessibility in urban areas like Surabaya, Indonesia. Furthermore, Agbonkhese (2024) discusses the transformative role of e-hailing services like Uber and Bolt in changing tourist mobility behaviours and addressing accessibility challenges in various destinations. Introducing e-hailing services can complement existing public transportation networks, enhancing accessibility and mobility for tourists within host destinations (Ghazizadeh et al., 2012; Madigan et al., 2016; Merat et al., 2016). This, in turn, could potentially increase visitation to peripheral attractions, supporting the tourism promotion efforts of local authorities.

This study aims to analyse the acceptance of e-hailing technologies among tourists, focusing on the factors influencing their intentions to use these services. Specifically, it seeks to understand whether a higher intention to use e-hailing services translates into actual usage behaviour, the types of services utilised, the levels of awareness and acceptance among tourists, and the overall impact on tourist satisfaction. Addressing these questions will fill the existing gaps in the literature and provide insights into the role of e-hailing services in advancing tourist mobility and enriching the overall travel experience. This research underscores the potential of e-hailing services to transform tourist behaviours, improve destination accessibility, and enhance sustainability efforts within host destinations.

Literature Review

E-hailing services hold significant potential to transform the tourism landscape by addressing mobility and accessibility challenges. Their success, however, depends on improving awareness levels, addressing safety concerns, and integrating seamlessly into existing transportation systems. The UTAUT framework offers a structured approach to understanding tourists'

adoption behaviours, with practical insights for enhancing the role of e-hailing services in tourism.

Understanding tourists' awareness of e-hailing services is critical in identifying gaps in knowledge that hinder the utilisation of these transport alternatives, ultimately affecting tourists' overall travel experiences. Awareness levels often dictate whether tourists can access remote or underserved attractions effectively. In Melaka, for example, inadequate awareness contributes to the underutilisation of e-hailing services, which are essential for connecting rural and urban areas (Rahimah Abdul Aziz, 2017; Nugroho & Zhang, 2022). Obeng and Ackaah (2023) emphasise that improved communication and marketing strategies can enhance awareness and increase the usage of such services, benefiting both tourists and local economies.

Tourists' acceptance of e-hailing services reflects their willingness to adopt emerging transportation technologies. High acceptance levels signal that tourists recognise the value of these services in offering flexibility, affordability, and convenience. Shah (2022) highlights that perceptions of service quality, including safety and reliability, significantly influence tourists' acceptance and adoption behaviours. The Unified Theory of Acceptance and Use of Technology (UTAUT) provides a structured framework to analyse these behaviours, focusing on four key constructs: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions (Venkatesh et al., 2003).

Performance Expectancy relates to tourists' belief that e-hailing services improve travel efficiency. Studies indicate that tourists view these platforms as valuable tools for accessing remote attractions and saving time (Obeng & Ackaah, 2023). For instance, Grab in Southeast Asia offers multi-modal transport options, which enhance convenience and support regional tourism. Effort Expectancy emphasises the ease of use of e-hailing platforms. Tourists are more likely to adopt these services if apps are intuitive and compatible with their devices (Shah, 2022). User-friendly interfaces, language localisation, and real-time GPS tracking are features that simplify the user experience (Obeng & Ackaah, 2023). Social influence reflects the impact of recommendations from peers, social networks, or societal norms on tourists' willingness to use e-hailing services. Online reviews, app ratings, and testimonials are critical in shaping tourists' perceptions (Shah, 2022). For instance, in Melaka, positive reviews on TripAdvisor highlight that the ease of exploring rural attractions via Grab could significantly enhance adoption rates. Facilitating Conditions encompass the resources and infrastructure needed for smooth service delivery. Features like reliable internet connectivity, seamless payment options, and responsive customer support systems are crucial (Nugroho & Zhang, 2022). The widespread availability of e-wallet integration in apps such as Grab enhances user convenience, particularly in cashless societies.

E-hailing services have become vital for urban mobility, with platforms like Uber and Grab transforming the tourism industry. In destinations like Melaka, these services address long-standing accessibility challenges, particularly in rural or less-frequented areas (Adly Zahari, 2018). Nugroho and Zhang (2022) argue that integrating e-hailing platforms into the tourism ecosystem enhances the accessibility of peripheral attractions, boosting regional tourism. Obeng and Ackaah (2023) suggest that such services can complement existing public transport networks, offering a seamless travel experience for tourists.

Globally, the integration of e-hailing services has reshaped transportation dynamics. Platforms like Uber and Bolt have emerged as flexible and cost-effective alternatives to traditional

transport. However, regulatory challenges and safety concerns remain persistent barriers to widespread acceptance (Shah, 2022). In Malaysia, policymakers must ensure these services adhere to safety standards while fostering innovation to enhance their appeal to tourists (Obeng & Ackaah, 2023). Policymakers and industry stakeholders can leverage findings on awareness and acceptance to design targeted campaigns that enhance adoption rates. For example, in Melaka, promoting the accessibility of rural attractions through e-hailing platforms could address tourists' mobility concerns while encouraging the exploration of less-frequented areas (Rahimah Abdul Aziz, 2017; Nugroho & Zhang, 2022). Tailored marketing and educational initiatives can also improve tourists' perceptions of safety and reliability, fostering greater acceptance and satisfaction.

Methodology

Research Design

The research design employed in this study represents a systematic and meticulous approach aimed at comprehensively understanding the adoption of e-hailing services among tourists in the historic city of Melaka, Malaysia. Integrating quantitative and qualitative methodologies, this research seeks to unravel the multifaceted factors influencing tourists' decisions to embrace ridesourcing during their visits.

Sampling Design

Convenience sampling with stratification was employed in this study to efficiently gather data while ensuring the representation of diverse tourist subgroups in Melaka. This approach was chosen due to its practicality and suitability for research scenarios with time and resource constraints. Stratification was integrated into the sampling process to address the tourist population's heterogeneity and enhance the findings' reliability. The tourist population was stratified based on two key criteria: type of tourist (domestic or international) and mode of transport (personal or public). This stratification ensures that the sample reflects each subgroup's distinct behaviours, preferences, and mobility patterns. For example, domestic and international tourists may differ significantly in their reliance on e-hailing services due to familiarity with local transportation systems and financial considerations. Similarly, public transport tourists are more likely to complement their journeys with e-hailing services than personal vehicles.

Convenience sampling was applied within each stratum by approaching tourists at accessible locations such as attractions, accommodations, and transportation hubs. This method enabled the researchers to recruit willing participants to participate efficiently. Exclusion criteria were applied to focus on the target population, excluding tourists travelling with pre-packaged itineraries or relying on two-wheel transport, as their mobility needs and use of e-hailing services differ significantly from those of the general tourist population. While convenience sampling inherently lacks the randomness of probability sampling, incorporating stratification mitigates this limitation by ensuring a proportional representation of key subgroups. This approach aligns with recommendations for stratified convenience sampling in studies requiring practical yet meaningful insights into diverse populations (Etikan et al., 2016). By combining these methods, the study captures a comprehensive understanding of factors influencing e-hailing service adoption across various segments of Melaka's tourist population.

Sample Size Determination

The sample size calculation considers various factors such as research objectives, confidence level, variability in the population, and cost constraints. Based on Cochran's sample size equation and assuming a confidence level of 95%, a sample size of 397 tourists who use e-hailing services in Melaka is determined.

Data Collection Procedures

The primary data collection process entails utilising a validated questionnaire administered to randomised respondents, supplemented by structured interviews. Trained enumerators, chosen through a rigorous selection process based on defined criteria, will survey to ensure the data's reliability and validity. Efforts will be made to achieve a representative sample by capturing data across diverse timeframes, including peak and off-peak tourism seasons. The data collection period is planned over four weeks, with participants selected using random sampling to minimise bias and enhance generalizability. Participation will be entirely voluntary, adhering to ethical research practices. Enumerators will undergo comprehensive training to familiarise themselves with the questionnaire's content, ensuring consistency in administration and understanding their roles and responsibilities in the data collection process. To acknowledge the participants' contribution, tokens of appreciation will be provided to both respondents and participating drivers, fostering goodwill and encouraging engagement. This methodical approach is designed to ensure high-quality data that accurately reflects the perspectives and experiences of tourists, forming a robust basis for subsequent analyses and insights.

Data Analysis

The selection of non-parametric methods, specifically Pearson correlation and Spearman's ρ , was informed by the data's characteristics and the need to investigate relationships without imposing assumptions about their distribution. These methods are well-suited for analysing ordinal or non-normally distributed data, commonly encountered in studies addressing human behaviour and preferences (Corder & Foreman, 2014). Pearson correlation was utilised to evaluate linear relationships between continuous variables, offering insights into the strength and direction of these associations. Conversely, Spearman's ρ , a non-parametric rank correlation measure, assessed monotonic relationships between variables, accommodating cases where associations deviate from linearity (Mukaka, 2012).

By integrating these methods, the analysis effectively captured the factors influencing ridesourcing adoption among tourists, accommodating the complex and potentially non-linear interactions within the data. The results yielded actionable insights for stakeholders, guiding the development of targeted strategies to enhance e-hailing service adoption and improve the overall tourist experience in Melaka. This approach enriched the understanding of ridesourcing adoption determinants, equipping stakeholders with the knowledge to implement tailored interventions and contributing to the broader advancement of tourism mobility solutions.

Findings

The study's findings regarding the relationship between tourists' intention to use E-hailing services and their actual usage behaviour indicate a statistically significant positive correlation (Pearson correlation coefficient = 0.123, $p = 0.014$), as illustrated in Table 1. This implies that higher levels of tourist intention to utilise E-hailing services are associated with increased actual usage behaviour. However, it is essential to note that the correlation coefficient suggests a relatively weak relationship between the variables. Conversely, the Analysis Of Variance results, as shown in Table 1, indicates no significant correlation between tourist intention and

actual usage behaviour (Spearman's $\rho = 0.054$, $p = 0.279$). This discrepancy in results may stem from the different statistical methods employed or the characteristics of the data.

Table 1: Correlation between Behavioural Intention and Actual Usage

		Behavioural Intention	Actual Usage
Behavioural Intention	Pearson Correlation	1	.123*
	Sig. (2-tailed)		.014
	N	397	397
Actual Usage	Pearson Correlation	.123*	1
	Sig. (2-tailed)	.014	
	N	397	397

Thus, while the Pearson correlation analysis supports the hypothesis that tourist intention positively influences E-hailing usage behaviour, caution is advised due to the weak correlation observed. The Analysis Of Variance findings do not support a significant correlation between the variables. Therefore, it is essential to interpret these results cautiously, recognising the limitations and potential sources of variation in the data. Further research may be warranted to explore additional factors that could comprehensively influence the relationship between tourist intention and E-hailing usage behaviour.

Table 2: Correlation between Behavioural Intention and Actual Usage (Spearman's ρ)

		Behavioural Intention	Actual Usage
Spearman's ρ	Behavioural Intention	Correlation Coefficient	1.000
		Sig. (2-tailed)	.054
		N	397
Actual Usage	Actual Usage	Correlation Coefficient	.054
		Sig. (2-tailed)	1.000
		N	397

Analysing tourists' awareness of E-hailing services in Melaka reveals several significant observations. A substantial portion of tourists demonstrated awareness of E-hailing services, with 44.3% indicating agreement and 42.3% strongly agreeing with their awareness. Conversely, only a minority expressed disagreement (7.8%) or uncertainty (1.0%) regarding their awareness of such services. These findings underscore a prevalent level of familiarity and acknowledgement of E-hailing services among tourists visiting Melaka. However, there remains a segment of the tourist population with varying degrees of awareness or uncertainty, highlighting the importance of further efforts to enhance awareness and understanding of E-hailing services.

The decision to employ Pearson and Spearman correlation methods stems from the need to comprehensively assess the relationship between behavioural intention and actual usage of e-hailing services. Pearson correlation is traditionally used for analysing linear relationships between continuous variables under the assumption of normality, which allows for an initial exploration of the strength and direction of the association ($r=0.123, p=0.014$). However, since the data in this study are non-parametric, Spearman's rank correlation ($\rho=0.054, p=0.279$) was also applied to evaluate monotonic relationships without assuming normality (Mukaka, 2012).

Using Pearson and Spearman correlation methods provides complementary insights into the relationship between behavioural intention and actual usage of e-hailing services. Pearson correlation, which assumes normality and linear relationships, revealed a weak but statistically significant positive association, suggesting that higher intention corresponds to greater usage. In contrast, Spearman's rank correlation, which evaluates monotonic relationships without requiring normality, found no significant association, highlighting potential complexities such as non-linear patterns or unaccounted mediating factors. Together, these methods cross-validate findings by examining the data from linear and non-parametric perspectives, ensuring a more nuanced understanding of the multifaceted nature of behavioural relationships in real-world settings. (Corder & Foreman, 2014).

Table 3: Tourist Awareness Level of E-hailing Services in Melaka (n=397)

	N	%
Strongly Disagree	4	1.0%
Disagree	31	7.8%
Neither Agree nor Disagree	18	4.5%
Agree	176	44.3%
Strongly Agree	168	42.3%

The cross-tabulation between tourists' primary transportation modes to Melaka and their attitudes towards E-hailing services provides valuable insights. Tourists who used private vehicles or buses as their mode of transport exhibited higher awareness levels of E-hailing services than those using other modes. Notably, individuals primarily using private vehicles demonstrated the highest awareness levels. This suggests the need for tailored marketing strategies and outreach efforts to promote E-hailing services effectively, particularly among tourists relying on specific transportation modes.

Table 4: Tourists' E-hailing Awareness by Primary Transportation Mode to Melaka (%) (n=397)

Mode of Transport to Melaka	Very Low Level	Low Level	Unsure	High Level	Very High Level	Total
Private Vehicle	1.0	7.81	4.53	13.10	25.19	51.63
Bus	0	0	0	28.96	13.60	42.56
Train	0	0	0	0.25	0	0.25
Ferry	0	0	0	0.50	0	0.50
Public Transport	0	0	0	0.25	0	0.25
E-hailing	0	0	0	1.26	3.53	4.79
Total	1.0	7.81	4.53	44.34	42.32	100

Regarding the acceptance of E-hailing services among tourists, the data indicates a substantial acceptance rate of 78.3%. Most tourists (56.4%) expressed acceptance, while 21.9% showed a highly favourable disposition towards E-hailing services. Conversely, a smaller proportion reported non-acceptance (9.1%) or uncertainty (12.6%). These findings underscore the significant favourability of e-hailing services within the tourist community, attributed to their convenience, accessibility, and user-friendly nature. As consumer preferences evolve towards more convenient and personalised travel experiences, E-hailing services are expected to remain integral to the tourist journey, necessitating ongoing innovation and collaboration among stakeholders to effectively meet evolving needs and expectations.

Table 5: Level of E-hailing acceptance at the destination (n=397)

	N	%
Does not Accept	36	9.1%
Not Sure	50	12.6%
Accept	224	56.4%
Highly Accept	87	21.9%

Discussion and Recommendation

This study explored the relationships between tourists' intentions to use e-hailing services, their usage behaviours, and their awareness and acceptance levels of these services in Melaka. The findings reveal significant implications for both the tourism and transportation sectors, offering insights into tourist behaviour, preferences, and areas for strategic improvement.

The findings identified a statistically significant but faintly positive correlation between tourists' intention to use e-hailing services and their actual usage ($r = 0.123, p = 0.014$). This suggests that while higher intention levels are associated with increased usage, other factors may also significantly influence behaviour. However, the Analysis of Variance (ANOVA) results did not support a significant relationship, indicating a discrepancy that warrants cautious interpretation and further exploration. These findings align with previous studies, such as Venkatesh et al. (2003), which emphasised that intention is a predictor of behaviour, but moderating factors such as facilitating conditions, social influence, and effort expectancy can significantly impact the strength of this relationship.

The awareness among tourists regarding e-hailing services in Melaka was generally high, with the majority indicating agreement or strong agreement about their familiarity. However, a small but notable proportion of respondents expressed uncertainty or disagreement regarding their awareness levels. This echoes findings from Shah (2022), which highlighted that awareness campaigns and informational initiatives are crucial for enhancing tourists' familiarity with emerging transportation technologies. The study found that tourists using private vehicles or buses had higher awareness levels than those relying on alternative transportation modes. This suggests that tailored strategies, such as targeted digital marketing and promotions at bus terminals and car parks, could be particularly effective in bridging the awareness gap for these segments.

Acceptance levels of e-hailing services were notably high, with most respondents expressing favourable attitudes. This supports the growing body of literature that emphasises the role of convenience, accessibility, and cost-efficiency in fostering acceptance of e-hailing platforms (Obeng & Ackaah, 2023; Nugroho & Zhang, 2022). Tourists' positive dispositions toward these services underscore their integral role in enhancing transportation experiences, particularly in destinations like Melaka, where efficient mobility solutions are vital for accessing diverse attractions. Empirical evidence suggests that aligning e-hailing services with evolving consumer preferences can help maintain their relevance and utility in tourism.

The findings highlight several actionable recommendations for enhancing the adoption and integration of e-hailing services within the tourism ecosystem. Comprehensive research into behavioural influences is paramount; future studies should employ mixed-method approaches, combining qualitative and quantitative methods to explore tourists' motivations, barriers, and decision-making processes more deeply. This aligns with previous calls for holistic examinations of technology adoption behaviours (Venkatesh et al., 2003; Mukaka, 2012).

Awareness campaigns are also critical. Stakeholders must invest in sustained initiatives to educate tourists about e-hailing services. Leveraging digital platforms, tourist information centres, and localised advertising at strategic entry points such as airports and bus terminals can effectively target diverse tourist segments and bridge existing knowledge gaps (Shah, 2022). Targeted marketing strategies tailored to specific transportation modes, such as private vehicle users or public transport riders, can optimise promotional efforts. For instance, offering incentives for first-time users or bundling e-hailing promotions with tourism packages can encourage adoption and enhance service visibility (Nugroho & Zhang, 2022).

Infrastructure development is another pivotal area for fostering the seamless integration of e-hailing services. Policymakers should improve internet connectivity in tourist hotspots, establish designated pick-up and drop-off zones, and install e-hailing-specific signage to enhance user convenience (Obeng & Ackaah, 2023). Additionally, fostering collaboration among e-hailing providers, tourism authorities, and local businesses is vital for innovation and improving the tourist experience. Collaborative efforts could include developing tailored e-hailing packages, such as discounts for popular routes or integrated tickets that combine e-hailing with attractions or accommodations. These strategies would enrich the mobility experiences of tourists, address existing accessibility challenges, and position e-hailing services as an indispensable component of the tourism ecosystem. By implementing these recommendations, stakeholders can capitalise on the potential of e-hailing services to elevate the tourism experience and meet the evolving needs of modern travellers.

References

- Adly Zahari. (2018). The State of Melaka Budget Tabling - Supply Bill (2019) 2018 (p. 17). Melaka State Government.
- Agbonkhese, C. (2024). The transformation of travel behaviours through the emergence of e-hailing services such as Uber and Bolt. *Journal of Migration and Global Studies*.
- Amir, S., Osman, M. M., Bachok, S., & Ibrahim, M. (2015a). Sustaining local community economy through tourism: Melaka UNESCO World Heritage City. *Procedia Environmental Sciences*, 28(December), 443–452. <https://doi.org/10.1016/j.proenv.2015.07.054>
- Asmaliana Ashari. (2017b). Melaka Tourism Basic Data.
- Astro Awani News Portal. (2015). Pelancong disaran elak masuk ke kawasan tumpuan Melaka pada waktu puncak | Astro Awani. Local News. <http://www.astroawani.com/berita-malaysia/pelancong-disaran-elak-masuk-ke-kawasan-tumpuan-melaka-pada-waktu-puncak-86874>
- Corder, G. W., & Foreman, D. I. (2014). *Non-parametric Statistics: A Step-by-Step Approach*. Wiley. <https://doi.org/10.1002/9781118840313>
- Danielis, R., Rotaris, L., & Valeri, E. (2012). Carsharing for Tourists. *Rivista Italiana Di Economia Demografia e Statistica*, LXVI(2).
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>
- Gao, T., & Deng, Y. (2012). A study on users' acceptance behaviour to mobile e-book applications based on the UTAUT model. *ICSESS 2012 - Proceedings of 2012 IEEE 3rd International Conference on Software Engineering and Service Science*, 376–379. <https://doi.org/10.1109/ICSESS.2012.6269483>
- Ghazizadeh, M., Peng, Y., Lee, J. D., & Boyle, L. N. (2012). Augmenting the Technology Acceptance Model with Trust : Commercial Drivers' Attitudes Towards Monitoring And

- Feedback. Human Factors And Ergonomics Society 56th Annual Meeting, 2286–2290. <https://doi.org/10.1177/1071181312561481>
- Hall, J. D., Price, J., & Palsson, C. (2017). Is Uber a substitute or a complement to public transit? In Working paper.
- Jaafar, R. E., Tambi, A. M. a., Sa'adin, I., & Husain, H. (2014). Exploring Local and Foreign Visitors' Behaviours and Satisfaction with a World Heritage Site. *Tourism, Leisure and Global Change*, 1(1), 22–24.
- Jais, A. S., & Marzuki, A. (2019). Multi-modality at tourism destination: An overview of the transportation network at the UNESCO Heritage Site Melaka, Malaysia. *International Journal of Supply Chain Management*, 8(6).
- Jais, A. S., & Marzuki, A. (2020). E-Hailing Services In Malaysia: Current Practices And Future Outlook. In *Malaysia Journal of the Malaysia Institute of Planners* (Vol. 18).
- Jalaldeen, M. R. M., Izzuddin, M. T. M., & Nor, R. M. (2019, November 6). Adopting e-hailing Application Among Malaysian Millennials. *The 7th International Conference on Cyber and IT Service Management (CITSM 2019)*.
- Jusoh, J., Marzuki, A., & Hamid, N. F. A. (2014a). The Challenges of Malay Cultural Heritage Products as a Tourist Attraction in Melaka The Challenges of Malay Cultural Heritage Products as a Tourist Attraction in Melaka. *12th APacCHRIE Conference 2014, MAY*, 0–10.
- Kantawateera, K., Naipinit, A., Sakolnakorn, T. P. N., & Kroeksakul, P. (2015). Tourist transportation problems and guidelines for developing the Khon Kaen, Thailand tourism industry. *Asian Social Science*, 11(2). <https://doi.org/10.5539/ass.v11n2p89>
- Kaya, F., Cetin, G., & Akova, O. (2014). The Impact of Direct Flights on Destination Development: The Case of Turkish Airlines. *4th Advances In Hospitality & Tourism Marketing & Management Conference*, June, 425–438.
- Li, Z., Hong, Y., & Zhang, Z. (2017). An empirical analysis of on-demand ride-sharing and traffic congestion. *Hawaii International Conference on System Sciences*, 1–13.
- Madigan, R., Louw, T., Dziennus, M., Graindorge, T., Ortega, E., Graindorge, M., & Merat, N. (2016). Acceptance of Automated Road Transport Systems (ARTS): An Adaptation of the UTAUT Model. *Transportation Research Procedia*, 14(0), 2217–2226. <https://doi.org/10.1016/j.trpro.2016.05.237>
- Malodia, S., & Singla, H. (2016). A study of carpooling behaviour using a stated preference web survey in selected cities of India. *Transportation Planning and Technology*, 39(5).
- Merat, N., Madigan, R., & Nordhoff, S. (2016). Human Factors, User Requirements, and User Acceptance of Ride-Sharing in Automated Vehicles. In *International Transport Forum* (Issue December, pp. 1–26). OECD.
- Mukaka, M. M. (2012). A guide to appropriate use of correlation coefficient in medical research. *Malawi Medical Journal*, 24(3), 69-71. <https://doi.org/10.4314/mmj.v24i3>
- Nor Hayati Zainudin. (2017). Melaka terima 16.25j pelancong tahun lalu | Sentral | Berita Harian. *Berita Harian*. <https://www.bharian.com.my/node/229180>
- Nordhoff, S., van Arem, B., & Happee, R. (2016). Conceptual Model to Explain, Predict, and Improve User Acceptance of Driverless Podlike Vehicles. *Transportation Research Record: Journal of the Transportation Research Board*, 2602(January), 60–67. <https://doi.org/10.3141/2602-08>
- Nugroho, S., & Zhang, J. (2022). Explorations of young people's sense of place using urban design qualities in Surabaya, Indonesia. *Sustainability*, 14(1), 472. <https://doi.org/10.3390/su14010472>

- Obeng, D. A., & Ackaah, W. (2023). Digitalisation of the paratransit (TROTRO) using mobility as a service: Adoption intentions of operators in Ghana. *Research in Transportation Economics*. <https://doi.org/10.1016/j.retrec.2023.101251>
- Rahimah Abdul Aziz. (2017). Heritage conservation: Authenticity and vulnerability of living heritage sites in Melaka state. *Kajian Malaysia*, 35, 39–58. <https://doi.org/10.21315/KM2017.35.SUPP.1.3>
- Rayle, L., Shaheen, S., Chan, N., Dai, D., & Cervero, R. (2014). App-based, on-demand ride services: comparing taxi and ridesourcing trips and user characteristics in San Francisco (Issue November).
- Septiani, R., Handayani, P. W., & Azzahro, F. (2017). Factors Affecting Behavioral Intention in Online Transportation Service: A Case Study of GO-JEK. *Procedia Computer Science*, 124, 504–512. <https://doi.org/10.1016/j.procs.2017.12.183>
- Shah, T. T. (2022). Innovative m-car rental service quality in India. *International Journal of Innovation Science*. <https://doi.org/10.1108/IJIS-11-2020-0265>
- Shaheen, S. A., Sperling, D., Wagner, C., & Shaheen, S. (1999). Title: A Short History of Carsharing in the 90's. *Journal of World Transport Policy & Practice The Journal Of World Transport Policy & Practice*, 5(3), 18–40. <https://doi.org/10.1007/s11116-007-9132-x>
- T.Escobar-Rodríguez, & Carvajal-Trujillo, E. (2014). Online purchasing tickets for low-cost carriers: Applying the unified theory of acceptance and use of technology (UTAUT) model. *Tourism Management*, 43, 70–88. <https://doi.org/10.1016/j.tourman.2014.01.017>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Wan Mohamad, W. N. A. A. Baiyah., Fuad, A. F. M., Shahib, N. S., Azmi, A., Kamal, S. B. M., & Abdullah, D. (2016). A framework of customer's intention to use Uber service in tourism destinations. *International Academic Research Journal of Business and Technology*, 2(2), 102–106.
- Yap, K. B., Wong, D., Wong, J., & Tunner, B. (2008). The Influence of Classroom Environment and Approaches to Learning in Achieving Outcomes in Marketing Education. *Vasa*.
- Zmud, J., Sener, I. N., & Wagner, J. (2016). Consumer Acceptance and Travel Behavior Impacts of Automated Vehicles.